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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/139,709	08/26/1998	SHOJI KIKUCHI	1232-4465 5642	
7	590 07/14/2004		EXAMINER	
MORGAN & FINNEGAN 345 PARK AVENUE			WALLERSON, MARK E	
NEW YORK, NY 10154			ART UNIT	PAPER NUMBER
			2626	21
			D. TT. 14.11 PD. 07/11/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Assign Commence	09/139,709	KIKUCHI, SHOJI			
Office Action Summary	Examiner	Art Unit			
	Mark E. Wallerson	2626			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with th	e correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be y within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS fr , cause the application to become ABANDO	e timely filed days will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 03 M	<u>lay 2004</u> .				
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) <u>1,2,5,7-14,17-28,30 and 32</u> is/are per 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) <u>1,2,5,7-14,17-28,30 and 32</u> is/are rejection claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the drawing(s) be held in abeyance. Solion is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document: 2. Certified copies of the priority document: 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applic rity documents have been rece u (PCT Rule 17.2(a)).	ation No ived in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summa Paper No(s)/Mail				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		I Patent Application (PTO-152)			

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Part III DETAILED ACTION

Notice to Applicant(s)

- 1. This action is responsive to the following communications: amendment filed on 3/8/04.
- 2. This application has been reconsidered. Claims 1, 2, 5, 7-14, 17-28, 30 and 32 are pending.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 2, 5, 24, 25, 26, 27, 28, 30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et. al. (hereinafter referred to as Kaneko) in view of Sakurai (U. S. 5,924,802) and Matsumoto et. al. (hereinafter referred to as Matsumoto) (U. S. 6,301,611).

With respect to claims 1, 2, 4, 5, 24, 25, 26, 27, 28, 30, and 32, Kaneko discloses a composite system (printer/scanner) including a first apparatus (which reads on Main Body of Device) (figure 3) having convertible options (101 and 102) to function as a printer (101) and a

reader (102), and an information processing apparatus (11), a detection device (4) provided in the first apparatus for detecting the option (printer or scanner) installed on the first apparatus (column 4, lines 25-30).

Although Kaneko discloses that various parameters regarding the image recording and reading are inputted from the image processing apparatus (11) (column 4, lines 64-67), Kaneko differs from claims 1, 2, 5, 24, 25, 26, 27, 28, 30, and 32 in that he does not clearly disclose a signaling unit provided in the first apparatus, adapted to automatically transmit to the information processing apparatus an option signal indicative of the detected option when the option is changed; print and read software stored on the image processing apparatus, launching either the print or read software depending on the selected option detected by the detection device, and terminating the print software when the detection device detects a reader is installed.

Sakurai discloses a printer and control method comprising a signaling unit (which reads on the controller) (5) provided in the first apparatus, adapted to automatically transmit to the information processing apparatus an option signal indicative of the detected option when the option is changed (figure 5; column 5, lines 28-43; column 6, lines 54-62; column 9, lines 56-58, and column 10, lines 1-5), wherein a host computer (100) stores algorithm or drivers (launching means) for a printer (column 5, lines 54-59) and an option device (scanner) (column 3, lines 36-41, column 6, lines 59-67, column 8, lines 44-67, and column 9, lines 14-34), launches either the print or scanner (option device) software depending on the selected option detected by the detection device (column 9, lines 14-34 and column 8, lines 48-62), and terminating the print software if the print software is operating when the detection device detects a reader is installed (which reads on changing the printer driver in accordance with the identification information

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obtained from the optional device - wherein the optional device may be a scanner, and which also reads on if it is determined that the printer corresponding to the device ID is not supported by the printer driver currently operative, then reading into memory a printer driver corresponding to the device ID, and making that printer driver active in the memory) (column 2, lines 11-15; column 3, lines 36-41; column 6, lines 35-67; column 8, line 63 to column 9, line 9, and column 10, lines 7-11).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein a signaling unit is provided in the first apparatus is adapted to automatically transmit an option signal to the information processing apparatus indicative of the detected option when the option is changed and wherein print and read software is stored on the image processing apparatus and launched depending on the selected option detected by the detection device and the print software is terminated when the detection device detects a reader is installed. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai so that changes of settings in the printer would not have to be performed as disclosed by Sakurai in column 8, lines 44-48. This enables printing and reading corresponding to a variety of option units.

Kaneko as modified also differs from claims 1, 2, 5, 24, 25, 26, 27, 28, 30, and 32 in that although he discloses sending the scanned image to the PC (column 5, lines 7-32), he does not clearly disclose allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed, and that the software is application software.

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Matsumoto discloses a communications apparatus having means for sending scan information to a host (column 3, lines 56-65), allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed (column 16, lines 54-67 and column 17, lines 39-53), and means for executing scan or print application software based on a selected scan or print operation (column 12, lines 15-30 and column 16, lines 23-29). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified to allow displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed and to execute the application software based on the selected operation. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Matsumoto in order to improve operator control.

With regard to **claim 7**, Kaneko discloses that the option is installed by mounting a print cartridge (101) or a reader cartridge (102) to a carriage of the first apparatus (column 1, lines 17-24 and column 3, lines 27-35).

With respect to claim 8, Kaneko discloses that the print cartridge is an ink-jet print cartridge (column 2, lines 58-62).

With regard to claim 9, Kaneko discloses that the reader cartridge uses LEDs as a light source (column 3, lines 36-52).

With respect to **claim 10**, Kaneko discloses that a color separation (by use of color filters) method for reading a color image is adopted for reading a color image by the read cartridge is frame sequential method for reading the color image by sequentially turning on each LED (column 3, lines 36-52, column 6, lines 55-63, and column 7, lines 8-20).

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With regard to claims 11 and 12, Kaneko differs from claims 11 and 12 in that he does not clearly disclose that the first apparatus is a printer or scanner. However, Sakurai discloses that the first apparatus may be a printer (50) or a scanner (column 9, lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein the first apparatus is a printer or scanner. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai in order to be able to apply the optional device to a plurality of main devices as disclosed by Sakurai in column 9, lines 10-13.

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko in view of Sakurai and Matsumoto as applied to claim 1 above, and further in view of Minamizawa (U. S. 6,065,074).

With respect to claim 13, Kaneko as modified differs from claim 13 in that he does not clearly disclose that the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms.

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Minamizawa discloses a multi-functional peripheral device (1) connected to a computer (2), wherein the multi-functional peripheral device (1) comprises a printer (39) and a scanner (38), and a task is selected based on the user (column 2, line 50 to column 3, line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified wherein the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Minamizawa in order to be able to execute simultaneous functions as disclosed by Minamizawa in column 1, lines 19-21.

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 14, 17, 18, 19, 20, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko (U. S. 6,134,030) in view of Sakurai (U. S. 5,924,802) and Matsumoto (U. S. 6,301,611).

With respect to claim 14, Kaneko discloses an apparatus (printer/scanner) (figure 3) having convertible options (101 and 102) to function as a printer (101) and a reader (102), which realizes a composite system (which reads on Main Body of Device) (figure 3) in combination

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with an information processing apparatus (11), a detection device (4) for detecting the option (printer or scanner) installed on the first apparatus (column 4, lines 25-30), and output means (figure 4) for outputting a signal indicative of the installed option detected by the detection device (4) (column 5, lines 54-67).

Although Kaneko discloses that various parameters regarding the image recording and reading are inputted from the image processing apparatus (11) (column 4, lines 64-67), Kaneko differs from claim 14 in that he does not clearly disclose a signaling unit provided in the first apparatus, adapted to automatically transmit to the information processing apparatus an option signal indicative of the detected option when the option is changed and that the print and read software are stored on the image processing apparatus, and terminating the print software when the detection device detects a reader is installed.

Sakurai discloses a printer and control method comprising a signaling unit (which reads on the controller) (5) provided in the first apparatus, adapted to automatically transmit to the information processing apparatus an option signal indicative of the detected option when the option is changed (figure 5; column 5, lines 28-43; column 6, lines 54-62; column 9, lines 56-58, and column 10, lines 1-5), wherein a host computer (100) stores algorithm or drivers (launching means) for a printer (column 5, lines 54-59) and an option device (scanner) (column 3, lines 36-41, column 6, lines 59-67, column 8, lines 44-67, and column 9, lines 14-34), and launches either the print or scanner (option device) software depending on the selected option detected by the detection device (column 9, lines 14-34 and column 8, lines 48-62), and terminating the print software when the detection device detects a reader is installed (which reads on changing the printer driver in accordance with the identification information obtained from the optional device

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- wherein the optional device may be a scanner, (which reads on changing the printer driver in accordance with the identification information obtained from the optional device - wherein the optional device may be a scanner, and which also reads on if it is determined that the printer corresponding to the device ID is not supported by the printer driver currently operative, then reading into memory a printer driver corresponding to the device ID, and making that printer driver active in the memory) (column 2, lines 11-15; column 3, lines 36-41; column 6, lines 35-67; column 8, line 63 to column 9, line 9, and column 10, lines 7-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein print and read software is stored on the image processing apparatus. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai so that changes of settings in the printer would not have to be performed as disclosed by Sakurai in column 8, lines 44-48. This enables printing and reading corresponding to a variety of option units.

Kaneko as modified also differs from claim 14 in that although he discloses sending the scanned image to the PC (column 5, lines 7-32), he does not clearly disclose allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed, and that the software is application software.

Matsumoto discloses a communications apparatus having means for sending scan information to a host (column 3, lines 56-65), allowing displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed (column 16, lines 54-67 and column 17, lines 39-53), and means for executing scan or print application software based on a selected scan or print operation (column 12, lines 15-30 and column 16,

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lines 23-29), and outputting a signal indicative of which software should be launched (which reads on executing scan or print control) (column 12, lines 15-25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified wherein a signaling unit is provided in the first apparatus is adapted to automatically transmit an option signal to the information processing apparatus indicative of the detected option when the option is changed and to allow displaying of an image read by the reader (scanner) when the detection device detects that the reader is detected or installed and to execute the application software based on the selected operation. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Matsumoto in order to improve operator control.

With regard to **claim 17**, Kaneko discloses that the option is installed by mounting a print cartridge (101) or a reader cartridge (102) to a carriage of the first apparatus (column 1, lines 17-24 and column 3, lines 27-35).

With respect to claim 18, Kaneko discloses that the print cartridge is an ink-jet print cartridge (column 2, lines 58-62).

With regard to claim 19, Kaneko discloses that the reader cartridge uses LEDs as a light source (column 3, lines 36-52).

With respect to **claim 20**, Kaneko discloses that a color separation (by use of color filters) method for reading a color image is adopted for reading a color image by the read cartridge is frame sequential method for reading the color image by sequentially turning on each LED (column 3, lines 36-52, column 6, lines 55-63, and column 7, lines 8-20).

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With regard to claims 21 and 22, Kaneko differs from claims 21 and 22 in that he does not clearly disclose that the first apparatus is a printer or scanner. However, Sakurai discloses that the first apparatus may be a printer (50) or a scanner (column 9, lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko wherein the first apparatus is a printer or scanner. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko by the teaching of Sakurai in order to be able to apply the optional device to a plurality of main devices as disclosed by Sakurai in column 9, lines 10-13.

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko in view of Sakurai and Matsumoto as applied to claim 14 above, and further in view of Minamizawa (U. S. 6,065,074).

With respect to claim 23, Kaneko as modified differs from claim 23 in that he does not clearly disclose that the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms.

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Minamizawa discloses a multi-functional peripheral device (1) connected to a computer (2), wherein the multi-functional peripheral device (1) comprises a printer (39) and a scanner (38), and a task is selected based on the user (column 2, line 50 to column 3, line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified wherein the first apparatus has both a printer mechanism and a reader mechanism and the option is selected between the printer and reader mechanisms. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kaneko as modified by the teaching of Minamizawa in order to be able to execute

Response to Arguments

11. Applicant's arguments filed 3/8/04 have been fully considered but they are not persuasive.

simultaneous functions as disclosed by Minamizawa in column 1, lines 19-21.

Applicant submits that *Sakurai* does not disclose terminating the print software when the detection device detects that a reader is installed. The Examiner disagrees. *Sakurai* discloses that the option device may be a scanner (column 3, lines 35-41). When the option device is attached to the printer, identification information pertaining to the option device is outputted to the information processing apparatus. The printer driver is then changed in accordance with the identification information obtained from the optional device (column 10, lines 1-10). Additionally, Sakurai discloses determining that the printer corresponding to the device ID is not supported by the printer driver currently operative, then reading into memory a printer driver

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corresponding to the device ID, and making that printer driver active in the memory (column 6, lines 35-67).

This clearly reads on terminating the print software when the detection device detects that a reader is installed.

Conclusion

12. All claims are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark E. Wallerson whose telephone number is (703) 305-8581. The examiner can normally be reached on Monday-Friday - 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Mark E. Wallerson Primary Examiner Art Unit 2626